

Easy-Mix PU Crystal Polyurethane Adhesive



Aluminium	11 N/mm ²
Tensile strength ISO 527 max.	12 N/mm ²
Strength-E-Module (DIN EN ISO 527)	240 - 280 N/mm ²
Steel bright	17 N/mm ²
Galvanized steel	12 N/mm ²
Stainless Steel	17 N/mm ²
PC	3,2 N/mm ²
PMMA	2,3 N/mm ²
Shore hardness D DIN EN ISO 868	73
Tensile Extension ISO 527 max.	20 %
Tg after curing at room temperature	48 °C
Thermoforming resistance	+50 °C
Temperature resistance	-55 to +100 °C

high-strength | fast-curing | for transparent and visually appealing adhesive bonds | pot life approx. 120 - 140 seconds

WEICON Easy-Mix PU Crystal is a crystal clear and colourless two-component polyurethane adhesive for bonding plastics (e.g. polycarbonate) as well as plastics to steel, stainless steel, aluminium, concrete, wood, and glass.

The high-strength and fast-curing structural adhesive is sandable and paintable after approx. 30 minutes. It provides excellent adhesion to a variety of materials and is resistant to weathering and many aggressive chemicals. PU Crystal is temperature-resistant from -55 °C to +100°C (-67 to +212 °F).

Due to its transparent curing, it is particularly suitable for bonding e.g. plastics and glass. It can also be used for structural adhesive bonding, where a coloured adhesive joint would affect the overall appearance of the component. PU Crystal bonds transparent plastics, like Plexiglas and other materials, can be bonded safely in a clean and visually appealing way.

PU Crystal can be used in plastic technology, machine construction, model and mould making, metal construction, ship and boat building, carriage and vehicle construction, trade show and exhibition construction, and in many other areas.

Technical Data

Base	Polyurethane
Colour after curing	crystal clear
Mixing ratio resin/hardener	1:1
Density of the mixture	1,13 g/cm ³
Viscosity at 25°C (+77°F) according to Brookfield	6.000 - 8.000 mPa·s
Pot-life at +20°C (+68°F)	2 - 4 min.
Handling strength (35% strength) after	30 min.
Capable of bearing mechanical loads (50% strength) after	60 minutes
Final strength (100%) after	12 h
Adhesive gap bridging	0,1 - 4,0 mm
Medium shear strength according to DIN EN 1465 at	

Note

The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

Surface pre-treatment

The prerequisite for perfect adhesion are clean and dry surfaces (e.g. cleaning and degreasing with WEICON Surface Cleaner). The highest strength values can be achieved through additional pre-treatment of the surfaces, such as roughening using blasting or abrasive agents. Several plastics, in particular polyamide, Teflon®, polyolefin etc. can only be bonded after special surface treatment, for example using fluoridation, low-pressure plasma, corona, flame impingement etc.

Processing

WEICON Easy-Mix products can be processed directly from the double cartridges with the help of the included static mixer. Reject the first 5 cm of the dosed bead. Apply adhesive to only one of the surfaces to be bonded. The pot life given is for a material quantity of 10 ml at room temperature. If larger quantities are used, the curing time will be faster. Similarly, higher ambient temperatures shorten the cure times (as a rule of thumb, every +10°C increase above room temperature will halve working and curing time). Temperatures below +16°C will extend working and curing times considerably, while below about +5°C, no reaction will take place at all.

Storage

The shelf life is 12 months when stored unopened at a normal climate (+23°C and 50 % rel. humidity).

Safety and health

When using WEICON products, the physical, safety technical, toxicological and ecological data and regulations in our EC safety data sheets (www.weicon.com) must be observed.

Available sizes:

10758050 Easy-Mix PU Crystal Polyurethane Adhesive
50 ml

Accessories:

10650005 Mixing Nozzle,

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Technical Datasheet

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10653050 Easy-Mix Dispenser D 50, D50
10953001 Processing Spatula, short
12955175 Dosing Tips,

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